

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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Fact Sheet Storage and Use of Fire Fighting Foams Under New Hazardous Substance Regulations

On April 25, 2016, the New York State Department of Environmental Conservation (DEC) completed an emergency rulemaking and concurrently proposed a formal rulemaking to list four new chemicals that may be found in Aqueous Film Forming Foam (AFFF) in the DEC list of hazardous substances. The list of hazardous substances is included in the DEC's regulation 6 NYCRR Part 597, "Hazardous Substances Identification, Release Prohibition, and Release Reporting."

What specific actions is DEC taking?

To address concerns about the potential environmental and public health impacts of these substances, DEC adopted an emergency rule that modifies the list of hazardous substances in Part 597 to include:

- perfluorooctanoic acid (PFOA-acid, Chemical Abstracts Service (CAS) No. 335-67-1),
- ammonium perfluorooctanoate (PFOA-salt, CAS No. 3825-26-1),
- perfluorooctane sulfonic acid (PFOS-acid, CAS No. 1763-23-1), and
- perfluorooctane sulfonate (PFOS-salt, CAS No. 2795-39-3)

How are these substances related to AFFF?

These substances have been and in some cases, may still be, components in AFFF. They form part of a class of chemicals called "perfluorinated compounds (PFCs)." Some of them, particularly the PFOS compounds, have been used as surfactants to improve the effectiveness of AFFF in fighting petroleum and other fires. In particular, AFFF manufactured by 3M Corporation and sold prior to 2004 contained PFOS. The use of PFOS in AFFF was voluntarily phased out by U.S. manufacturers in 2002. Inventories were sold through 2003. PFOS-based AFFF is still manufactured in other countries (e.g., China, India). Older AFFF that meets military specifications may contain PFOS. PFOA has also been used in some AFFF. The manufacture of PFOA in the U.S. was reportedly voluntarily phased out in 2015.

What impact does this have on storage and use of AFFF?

There are three major impacts of the rulemaking on the storage and use of AFFF:

1. If you are storing AFFF, you may be subject to the registration and storage requirements of the Chemical Bulk Storage (CBS) regulations (6NYCRR Parts 596 – 599). These requirements include standards for the storage and handling of hazardous substances in tanks or other bulk containers (details below).
2. The release of one pound or more of one of these hazardous substances to the environment is prohibited. Part 597 will allow the use of AFFF containing PFOS or PFOA for fighting fires (not for training) for one year until April 25, 2017.

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3. Where there has been a release of one of these hazardous substances causing environmental contamination, cleanup may be required under one of the DEC's remedial programs (i.e., State Superfund or a Brownfields Program).

How do I know if I am subject to the CBS regulations?

You are subject to the storage and handling requirements of the CBS regulations if the AFFF you have meets both of the following conditions:

1. the AFFF contains 1% or more by volume of one or more of the hazardous substances listed in Part 597; and
2. the AFFF is stored in
 - a. an aboveground storage tank (stationary device) of 185 gallons or greater,
 - b. any size underground tank, or
 - c. in a container (non-stationary device) that is used to store 1,000 kilograms (2,200 pounds) or more for a period of 90 consecutive days or more.

To determine the percentage of hazardous substance in AFFF in your possession, you will need to contact the manufacturer of the AFFF. DEC is in communication with the manufacturers and is requesting that this information be provided on their websites.

If you meet both of the above conditions, then you need to register your tanks (stationary devices) with the DEC (see Part 596). The registration requirement went into effect on the effective date of the regulation (April 25, 2016). While the registration requirements are immediately applicable, the storage and handling requirements found in Part 598 are not applicable for two years (until April 25, 2018).

If the AFFF I have contains one or more of the newly listed hazardous substances, can I still use it?

The release of any hazardous substance to the environment in a quantity greater than the "reportable quantity" (as specified in the regulation, this is one pound for these substances) is prohibited. Recognizing the public safety issues involved and the need for time to identify and replace AFFF containing these substances, the newly adopted regulations allow the continued use of AFFF that contains these substances for up to one year, until April 25, 2017. These foams may be released to the environment only for fighting fires and not for training or any other purpose.

If you use AFFF that contains these hazardous substances to fight a fire and more than one pound of a hazardous substance is released to the environment, then the release must be reported to the DEC's Spill Hotline (1-800-457-7362). In order to determine if there has been a release of one pound or more, you will need to know the amount of foam concentrate that has been used and the concentration of the hazardous substance in the foam. Manufacturers may provide guidance on their websites on how to make this determination, but if this is not the case you should contact the manufacturer of any AFFF in stock to determine the percentage of these compounds it may contain.

If you determine that the AFFF you have contains hazardous substances such that you cannot use it without releasing one pound or more of a hazardous substance, then you should replace it on or before April 25, 2017. Small quantities (e.g., five-gallon container) may be disposed of in a permitted Part 360 landfill with the approval of the landfill and the DEC. Bulk quantities should be disposed of in a permitted municipal solid waste incinerator (see: http://www.dec.ny.gov/docs/materials_minerals_pdf/wtelist.pdf) with the approval of the incinerator operator and the DEC.

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